

16. (Newly Added) An display device as recited in claim 14, wherein one of said signals is derived at said switching device and is indicative of a state of a phase from said phase generator.

Al 17. (Newly Added) A display device as recited in claim 13, wherein said adaptive control further comprises commencing a first phase only upon termination of a second phase.

18. (Newly Added) A display device as recited in claim 18, wherein a third phase can change only after said second phase is in an on-state.

II. In the Drawings

Please amend the drawings per the proposed changes submitted in handwritten form in red ink.

Remarks

Status of the Claims

Upon entry of the present amendment, claims 7-18 are pending in the above captioned application. Claims 7 and 13 are the independent claims.

Request for Consideration of Art Submitted

According to Applicant's case file, and information disclosure statement (IDS) was filed with the application on December 17, 2001. However, no indication of the

consideration of the art submitted therewith appears to have accompanied the present Office Action. If form PTO-1449 was completed by the Examiner upon consideration of the art cited, please forward same to Applicant's attorney at the address of record. Otherwise, it is respectfully requested that the art of this previously filed IDS be considered and evidence of this consideration be supplied to Applicant's attorney.

Objections

The declaration was objected to due to alteration not in compliance with 37 C.F.R. 1.52(c). A properly executed declaration will be provided under separate cover in the future.

The drawings were objected to as not including every feature specified in the claims. Handwritten changes in red ink to remedy this error are enclosed. Upon approval of these changes, formal drawings will be submitted.

Rejections Under 35 USC § 112

Claims 1-6 were rejected under 35 USC § 112, ¶ 2 as being indefinite for failing to particularly point out and distinctly claim that which applicant regards as the invention.

Claims 1-6 have been canceled via the present amendment, and as such, these rejections are believed to be moot.

Rejections Under 35 USC § 102(b)

1. Claims 1-6 were rejected under 35 USC § 102(b) as being anticipated by *Liu* (U.S. Patent 6,160,723). Claims 1-6 have been canceled. For at least the reasons that follow, newly added claims 7 and 13, and the claims that depend therefrom are believed to be allowable over the applied art.

In order to properly establish a *prima facie* case of anticipation, it is required that ***all*** of the claimed elements be disclosed in the applied art. It follows that if a ***single*** element is neither taught nor suggested in the applied art, a *prima facie* case of anticipation cannot be established.

Claims 7 and 13 each include the limitation of:

"...a charge pump, which includes a plurality of stages, wherein signals from each of said plurality of stages are fed back to said phase generator to effect adaptive control of a plurality of phases of said plurality of stages."

It is respectfully asserted that the reference to *Liu* lacks a teaching of at least this claimed element. To this end, *Liu* is drawn to a charge pump circuit, and includes a plurality of voltage-boosting stages. However, the reference to *Liu* lacks at least the teaching of signals' from each of said plurality of stages being fed back to a phase generator *to effect adaptive control of a plurality of phases* of the plurality of stages of the charge pump. Rather, the reference is drawn to feedforward (306 and 308) and feedback level shifters (302, 304), wherein the latter feedback respective boosted voltages to the gates of the NMOS transistors of earlier stages of the charge pump circuit 300, so that the source of the transistors can be driven to the full voltages placed

on their drains, thereby canceling the effects of the respective threshold voltages of the MOS transistors in those stages. The feedforward level shifters 306 and 308 are used to feed forward respective boosted voltages of earlier stages to clock later stages to reduce the number of stages required to generate a desired pump output voltage. (Please refer to column 4, lines 36-54 for details of the above assertion.)

As such, the reference to *Liu* lacks at least the referenced limitation which effects **adaptive control of a plurality of phases** of the plurality of stages. (It is noted that there is apparently only one occurrence of the term 'phase' in the reference, and this refers to the antiphase condition of the CLK and its inverse.)

For at least the reasons set forth above, independent claims 7 and 13 are believed to be allowable over the reference to *Liu*. It follows, therefore, that the claims which depend directly or indirectly therefrom are also allowable. As such, claims 8-12 and 14-18 are also believed to be allowable. Allowance is earnestly solicited.

In addition to the reasons set forth above, claim 13 is believed to be allowable because it is drawn to a display device, which is not taught nor suggested in the reference to *Liu*.

In addition to the reasons set forth above, claims 10 and 15 are both believed to be allowable over the applied art because each of these claims includes the limitation that "...one of said signals is derived between said driver and said charge storage device and is indicative of a state of a phase from said phase generator." This is neither taught nor suggested by the reference to *Liu*.

In addition to the reasons set forth above, claims 11 and 16 are believed to be allowable over the applied art as each claim includes the limitation that "...said adaptive control further comprises commencing a first phase only upon termination of a second phase." This is neither taught nor suggested by the reference to *Liu*.

In addition to the reasons set forth above, claims 12 and 17 are believed to define over the applied art because each claim includes the limitation that "...said adaptive control further comprises commencing a first phase only upon termination of a second phase." This is neither taught nor suggested by the reference to *Liu*.

Therefore, for at least the reasons set forth above, claims 7-18 are believed to be allowable over the reference to *Liu*. Allowance is earnestly solicited.

2. Claims 1, 5 and 6 were rejected under 35 USC § 102(b) as being anticipated by *Boerstler* (U.S. Patent 5,870, 003). Claims 1, 5 and 6 have been canceled. However, even if these claims remained pending, it is respectfully submitted that this rejection does not meet the criteria set forth in MPEP § 706. To wit, this section of the MPEP states that it is the goal of examination to clearly articulate any rejection early in the prosecution process so that applicants have the opportunity to provide evidence of patentability and otherwise reply completely at the earliest opportunity.

The Office Action states "Regarding claims 1, 5 and 6, figure 2 of **Young** shows a device (14) that supplied signals to the phase generator circuit (11, 12, 13, 16, 17, 18, 20)." (Emphasis added). (Please refer to page 4 of the Office Action.)

The undersigned believed Young was in referred to in error, and that the Office Action meant to refer to Fig. 2 of *Boerstler*. However, Fig. 2 of *Boerstler* is drawn to a

voltage controlled oscillator, and none of the reference numerals set forth in the Office Action are found in Fig. 2 of *Boerstler*. Moreover, there is no reference to **Young** found in the art cited thus far by applicant or the USPTO. As such, it is unclear what reference is being applied. Accordingly, it is respectfully submitted that the present rejection meets the requirements of MPEP § 706. Withdrawal of this rejection in present form is respectfully requested.


Conclusion

In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact William S. Francos, Esq. (Reg. No. 38,456) at (610) 375-3513 to discuss these matters.

Except as otherwise stated in the previous Remarks, applicants note that each of the amendments have been made to place the claims in better form for U.S. practice or to clarify the meaning of the claims; not to distinguish the claims from prior art references, otherwise narrow the scope or comply with other statutory requirements. Moreover, Applicants reserve all rights they may have under the Doctrine of Equivalents.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies to charge payment or credit any overpayment to Deposit Account Number 50-0238 for any additional fees under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17.

Respectfully submitted on behalf of:
Koninklijke Philips Electronics N.V.

A handwritten signature in black ink, appearing to read 'William S. Francos', written in a cursive style.

William S. Francos, Esq.
Reg. No. 38,456

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